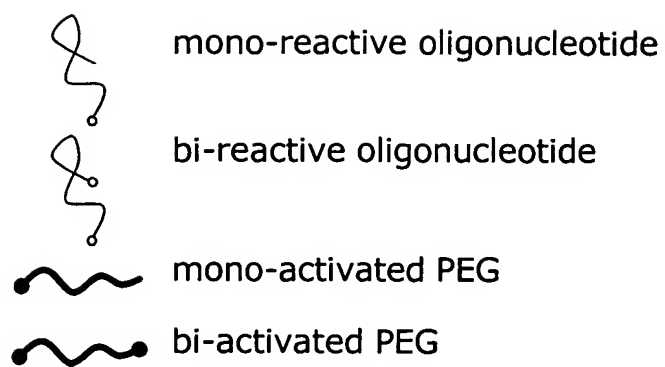
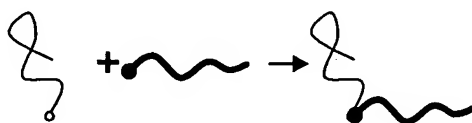


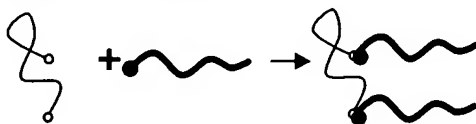
**Figure 1**



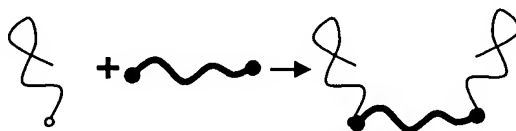
### standard PEGylation



### multiple PEGylation

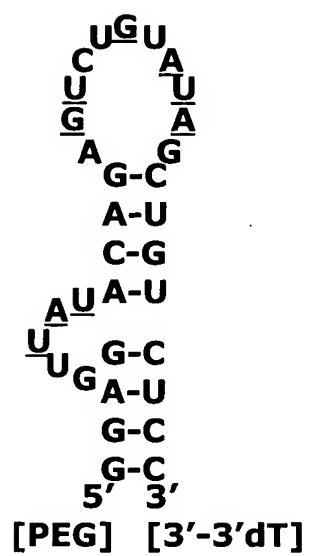


### dimerization via PEGylation



**Figure 2**

(A).



SEQ ID NO:151

(B)

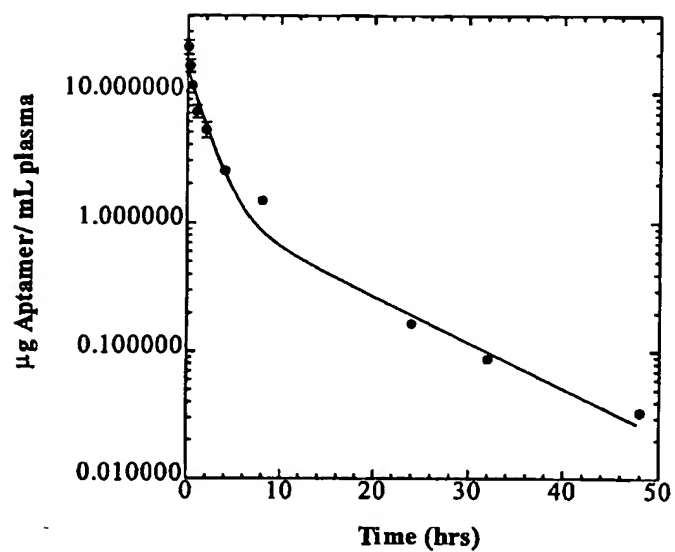
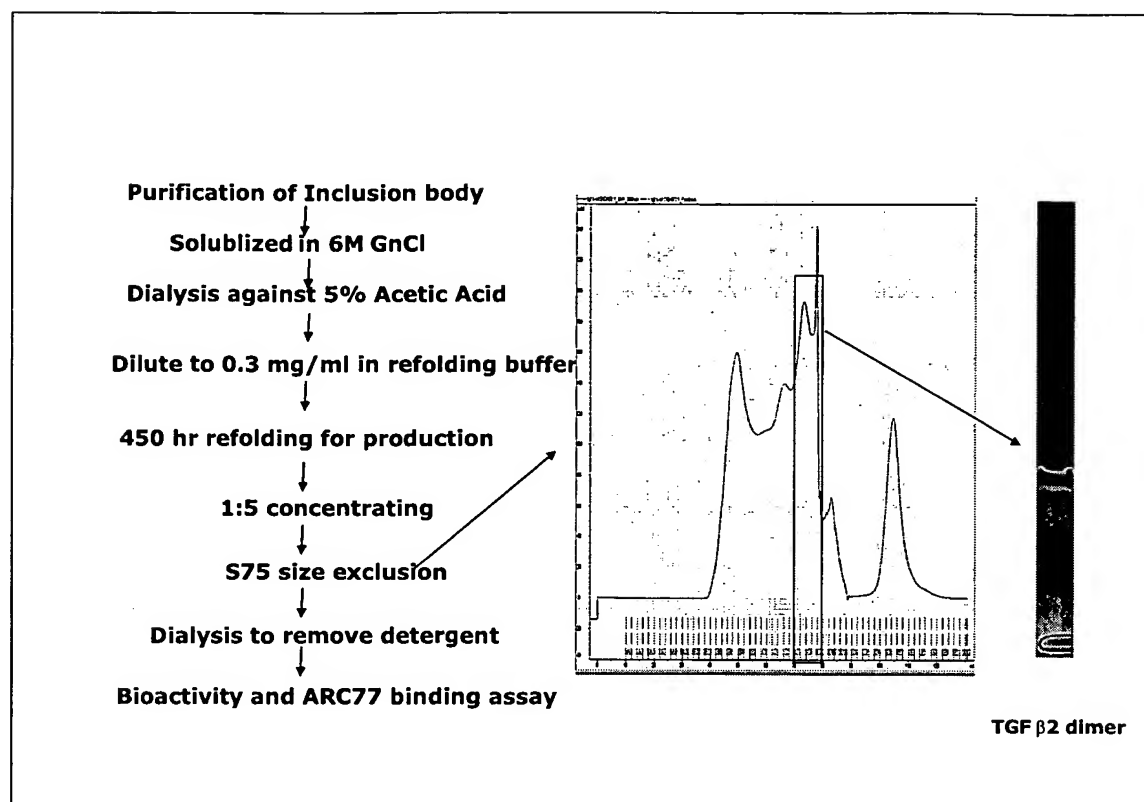
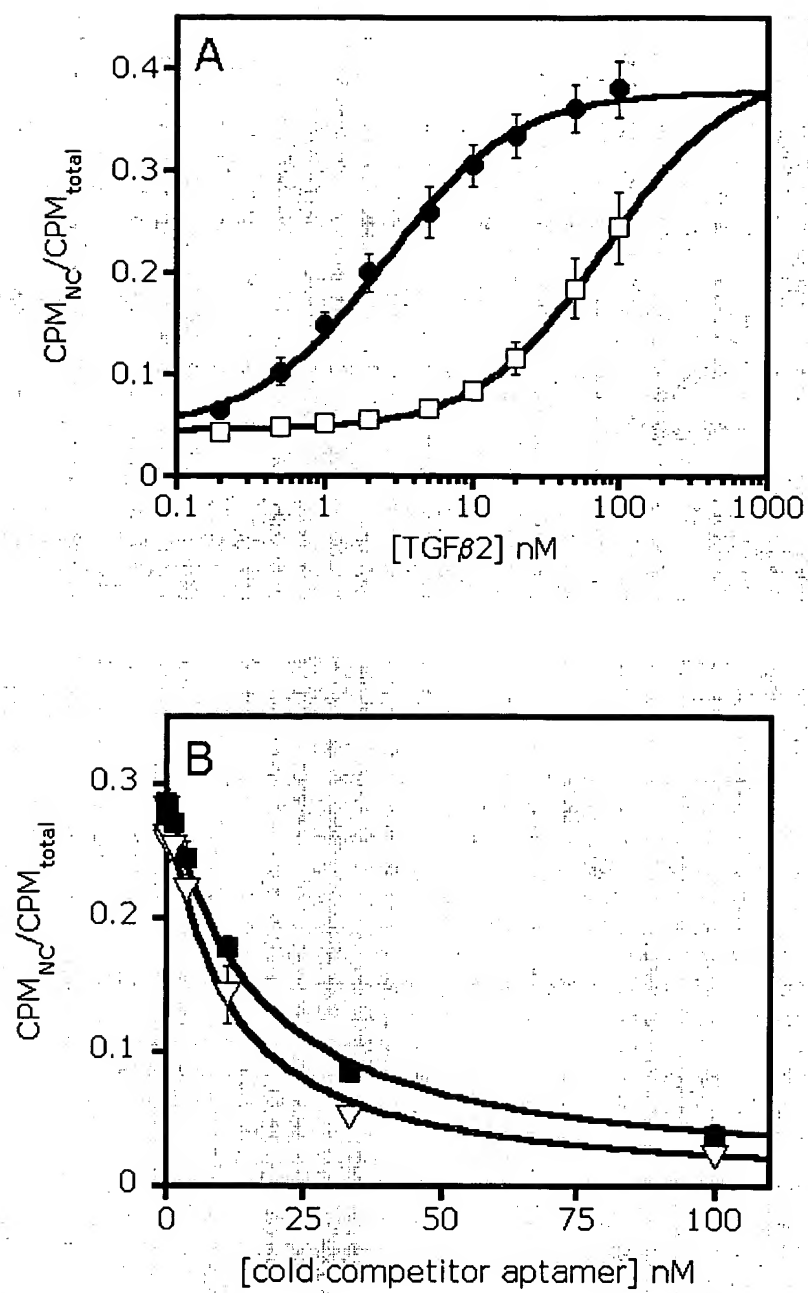


Figure 3

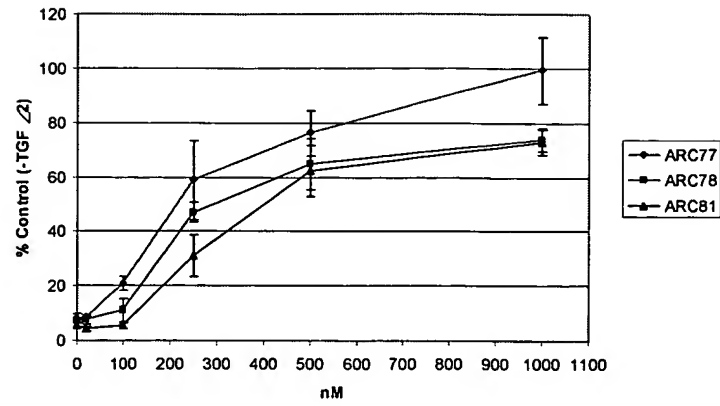


**Figure 4**

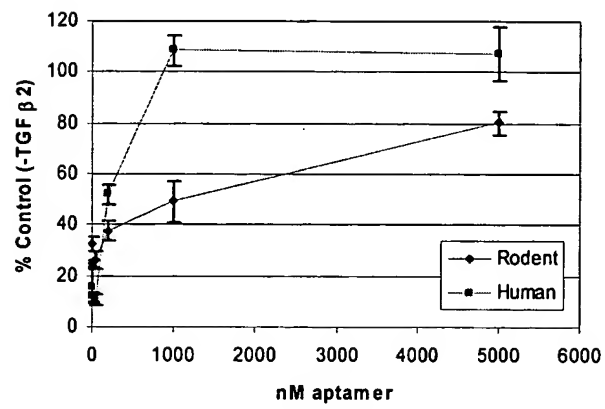


**Figure 5**

A.



B.



C.

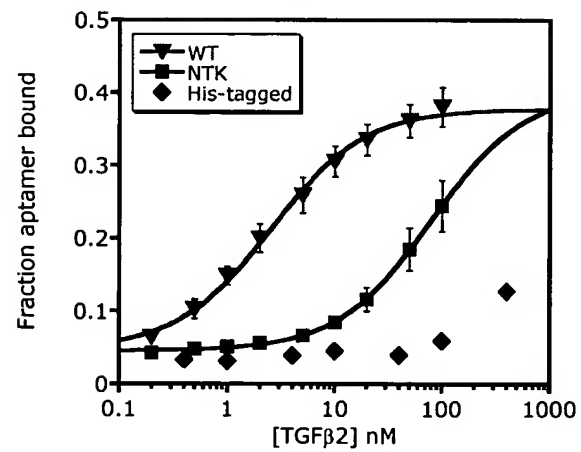
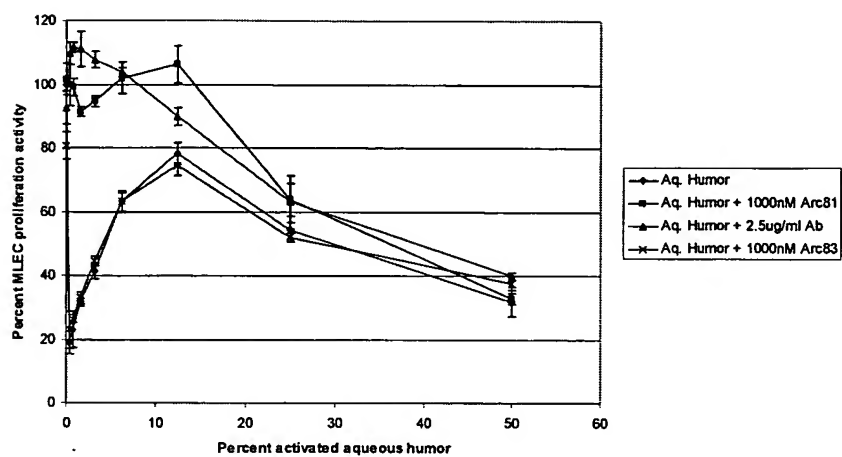
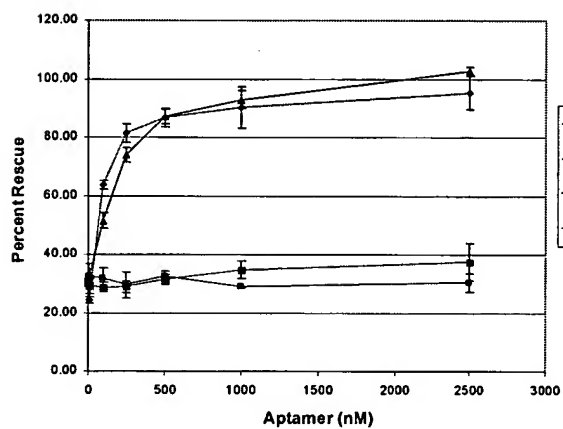


Figure 6

A.



B.



C.

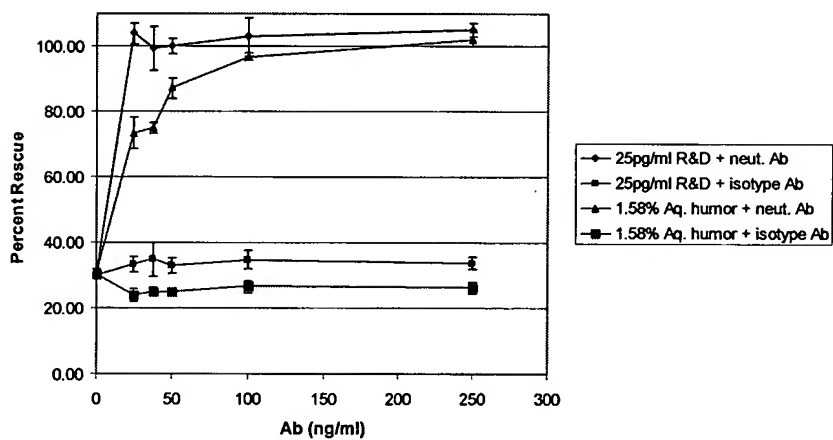


Figure 7

## Selection, minimization and characterization of a TGF $\beta$ 2 aptamer

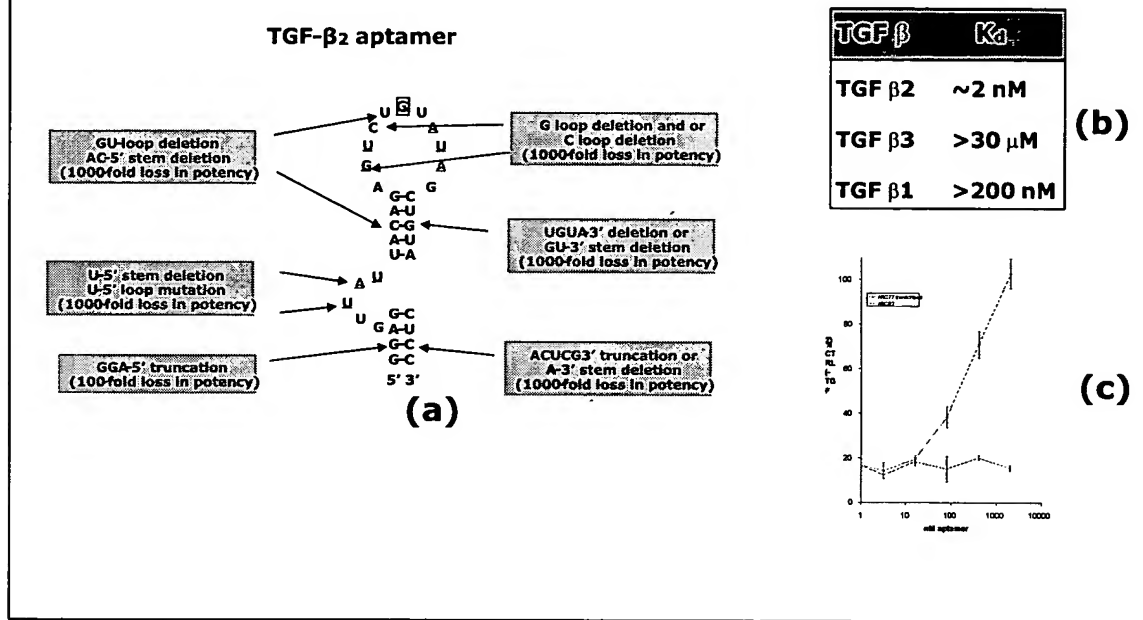


Figure 8



## Alpha-screen assay suggests 2:1 aptamer/TGF $\beta$ 2 stoichiometry

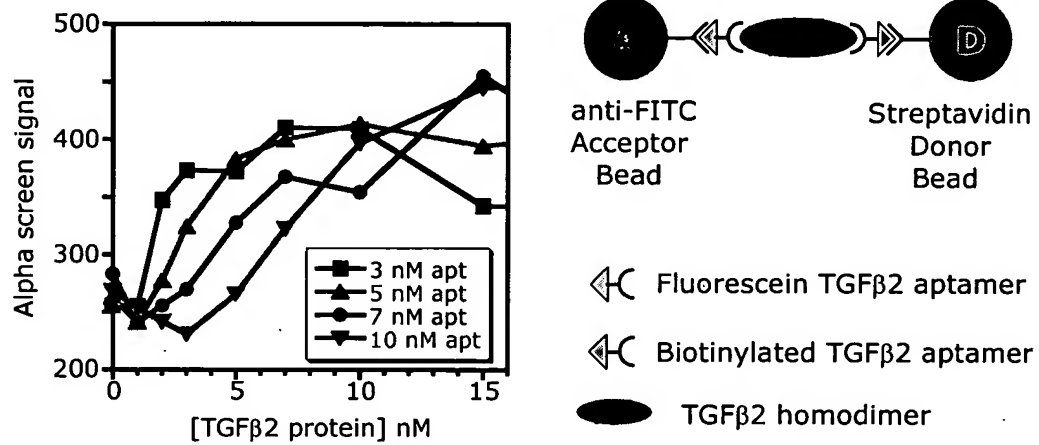


Figure 9

## Modifications of TGF b2 have different effects on its activity and aptamer binding affinity

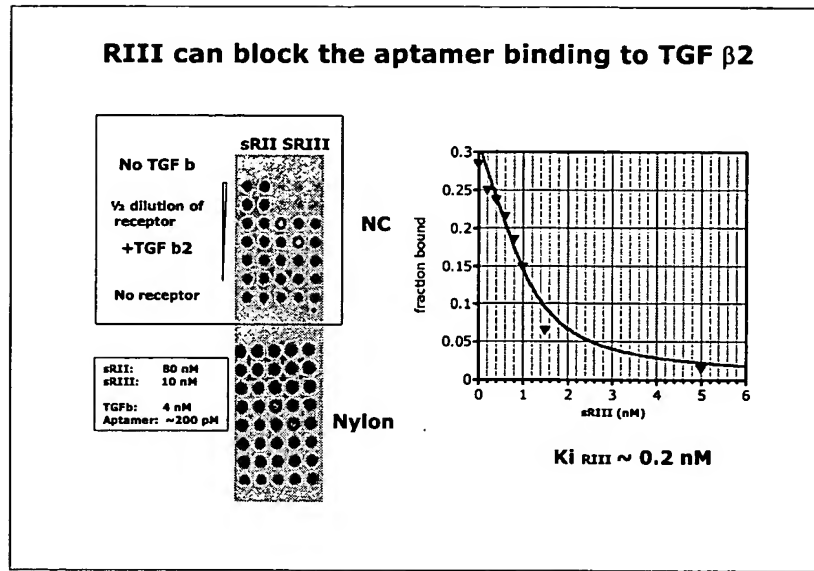
**WT** ALDAAYCFRNVQDNCCLRPLYIDFKRDLGW ((SEQ ID NO: 152))  
**N-Long tag** MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDRWALDAAYCFRNVQDNCCLRPLYIDFKRDLGW ((SEQ ID NO: 153))  
**N-short tag** MHHHHHALDAAYCFRNVQDNCCLRPLYIDFKRDLGW ((SEQ ID NO: 154))

**WT** GYNANFCAGACPYLW SSDTQHSRVLSLYNTINPEASAPCCVSQDLEPLTILYYIGKTPKIEQ LSNMI ((SEQ ID NO: 155))  
**N-Long tag** GYNANFCAGACPYLW SSDTQHSRVLSLYNTINPEASAPCCVSQDLEPLTILYYIGKTPKIEQ LSNMI ((SEQ ID NO: 156))  
**N-short tag** GYNANFCAGACPYLW SSDTQHSRVLSLYNTINPEASAPCCVSQDLEPLTILYYIGKTPKIEQ LSNMI ((SEQ ID NO: 157))

TGF b2	EG100 (pM)	Kd aptamer (nM)	Ic50 aptamer (nM)
WT	~0.5	~2.5	~200
S59T/R60K/K94N	~0.5	~80	~3000
K94N	~0.5	~2.5	~200
N-long tag	~40	>500	No effect
N-short tag	~20	~300	n.d.

Figure 10

A.



B.

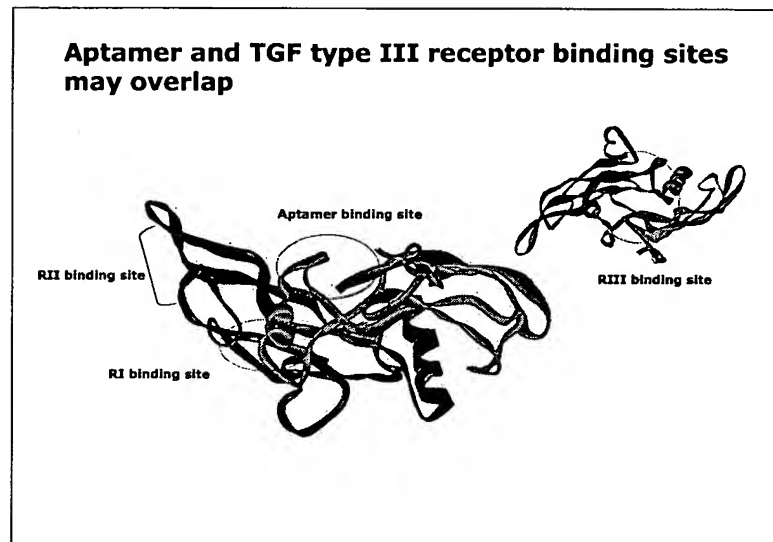


Figure 11

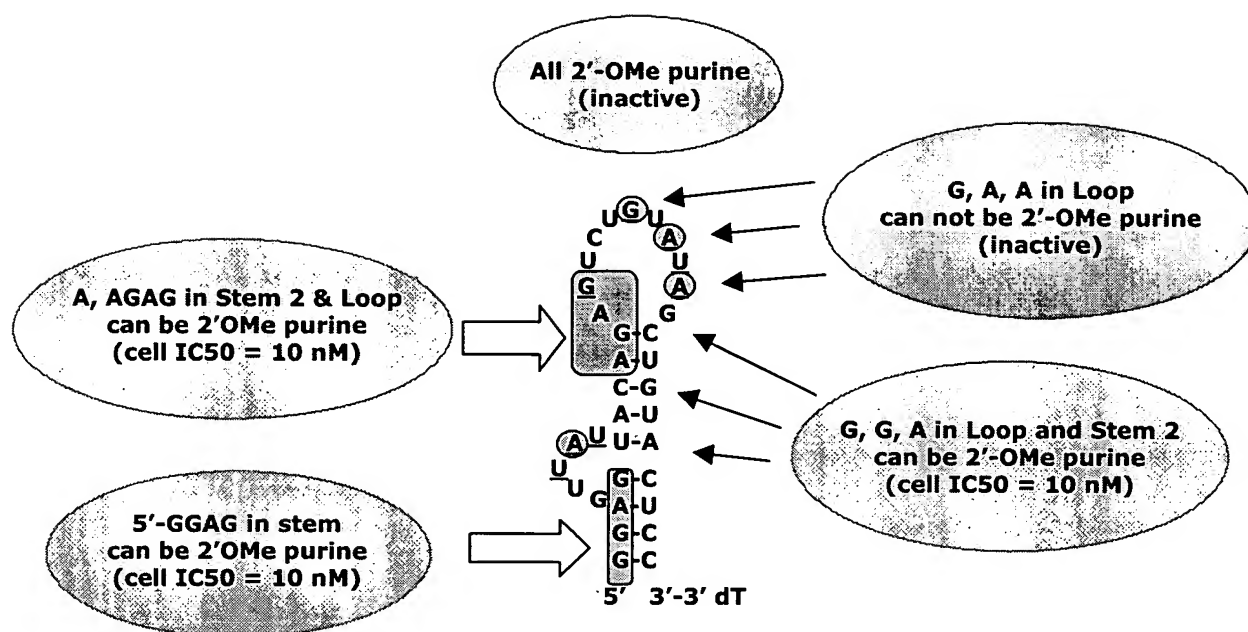
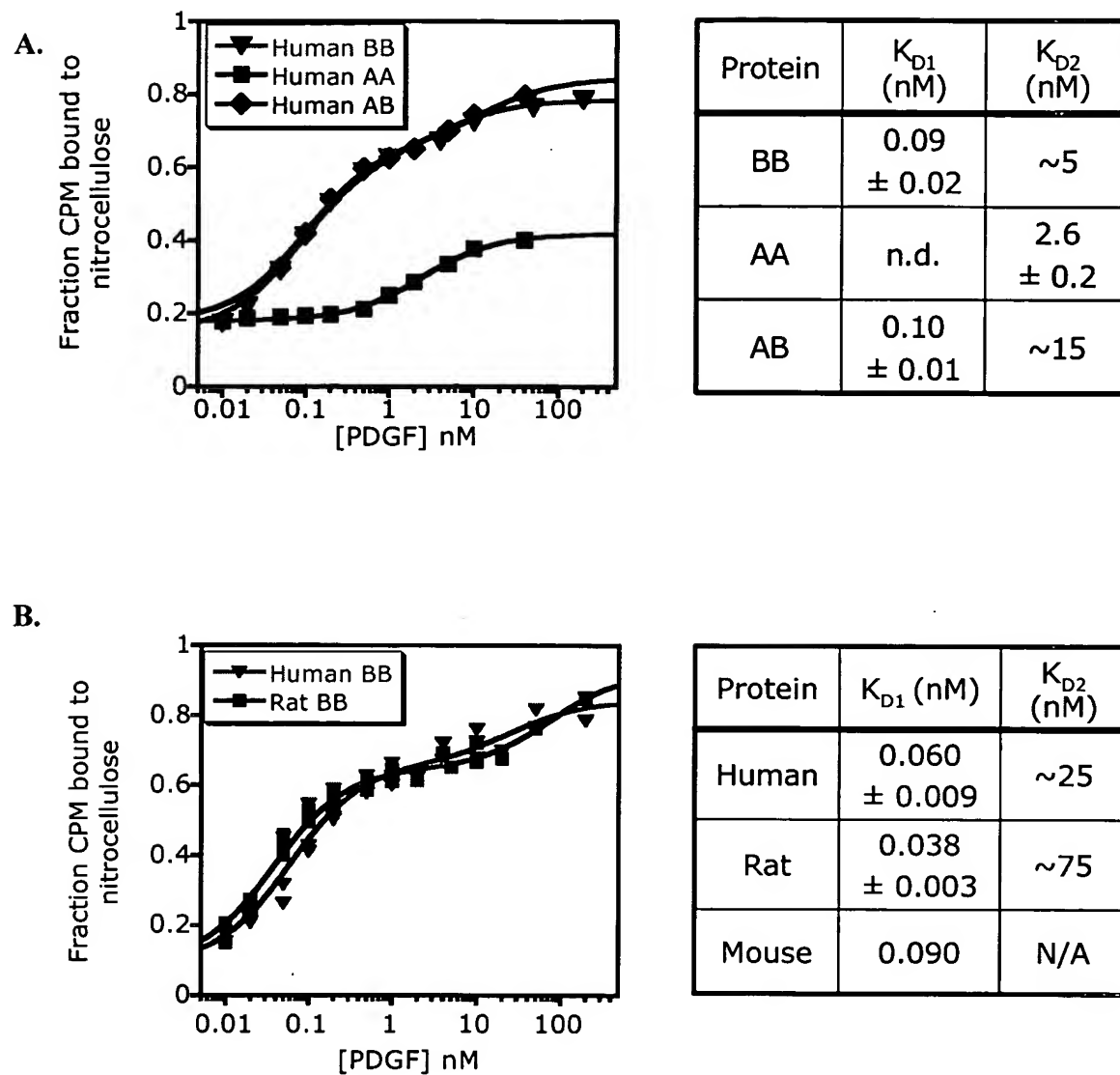
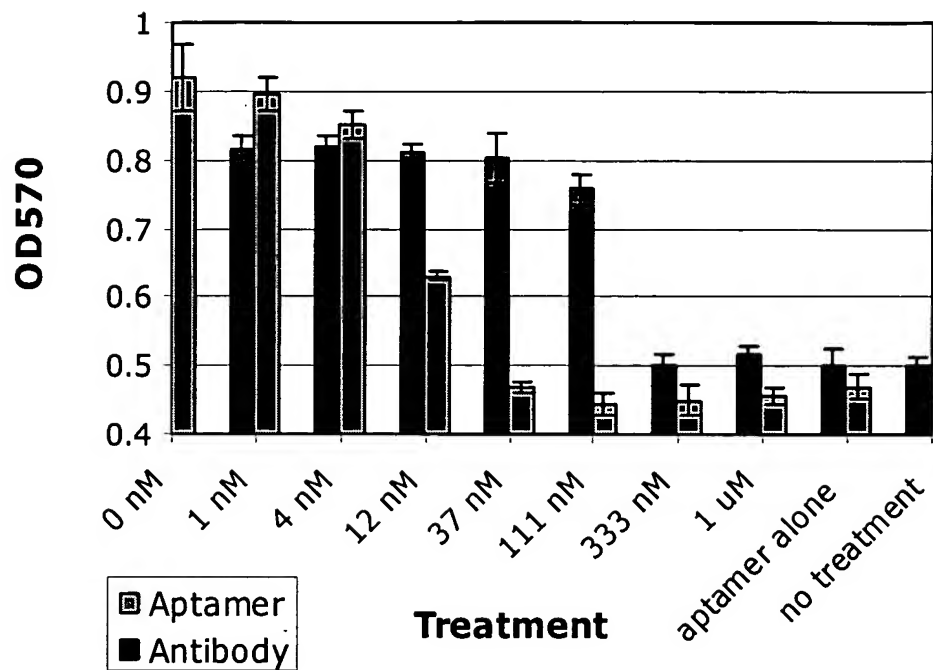


Figure 12



**Figure 13**

A.



B.

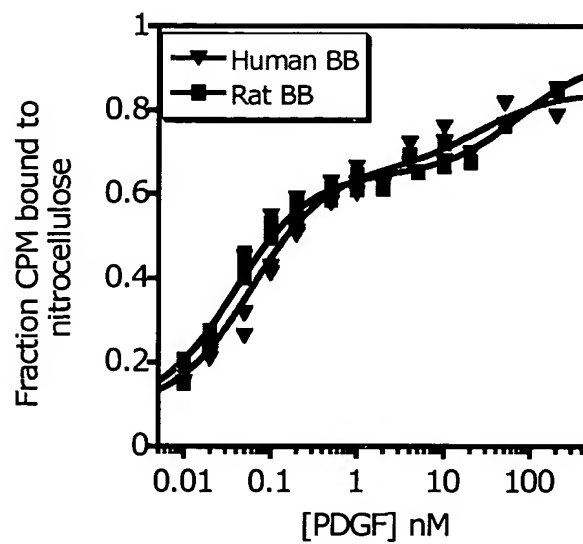
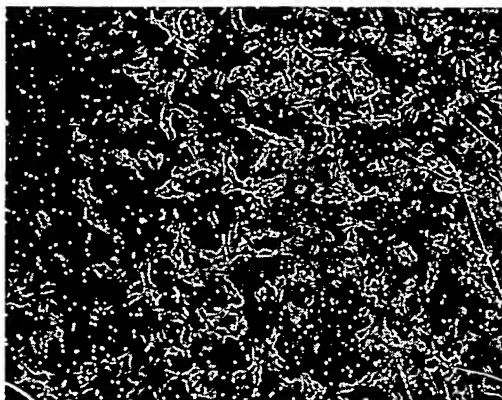
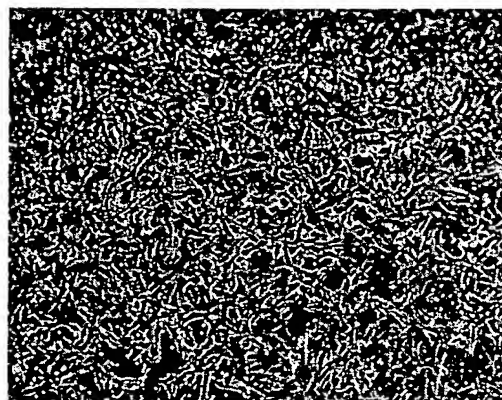


Figure 14

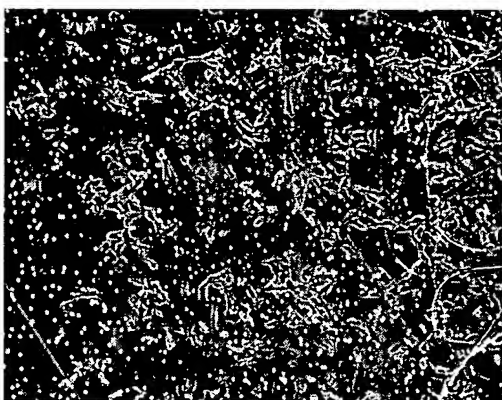
A.



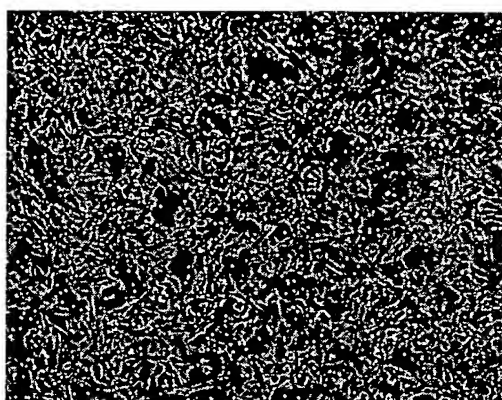
B.



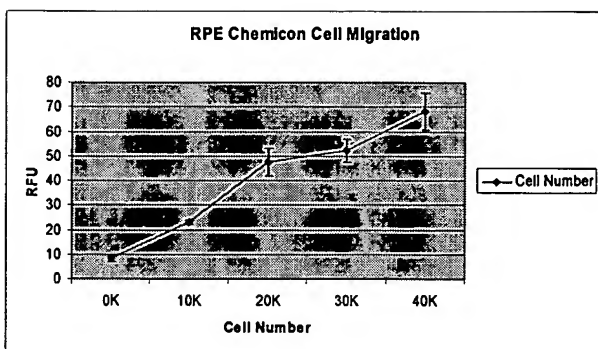
C.



D.



E.



F.

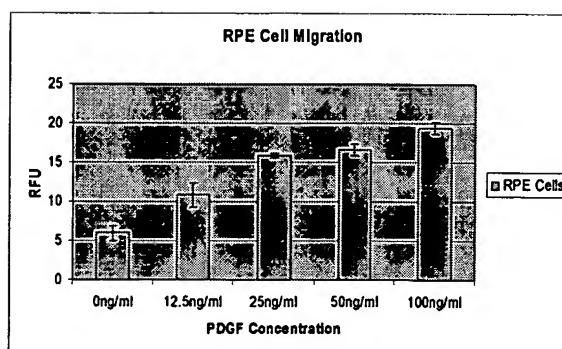


Figure 15

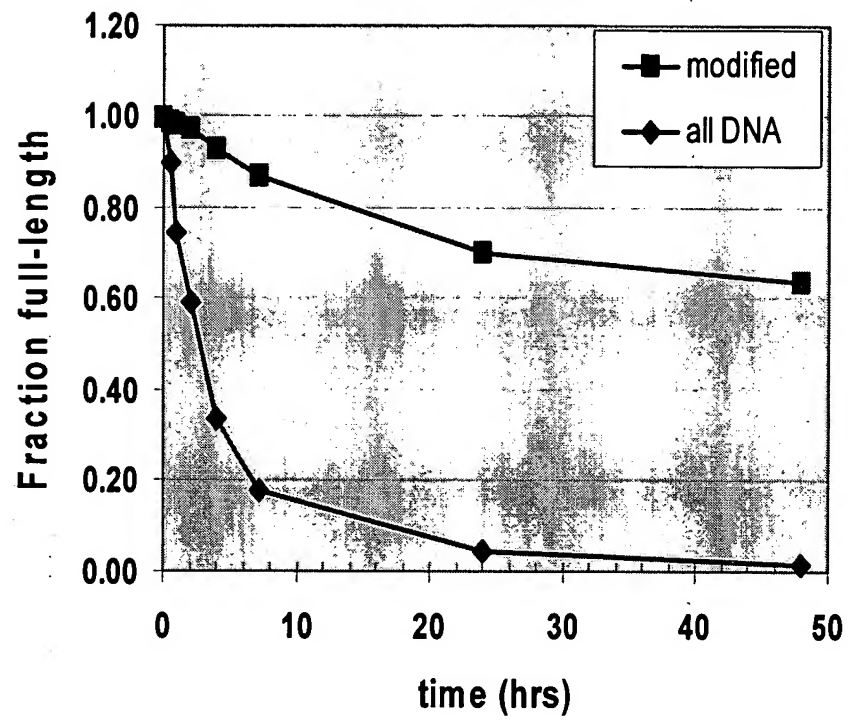


Figure 16



PK study 03002-002 - ARC127 IV, IP, SC admin, 10 mg/kg

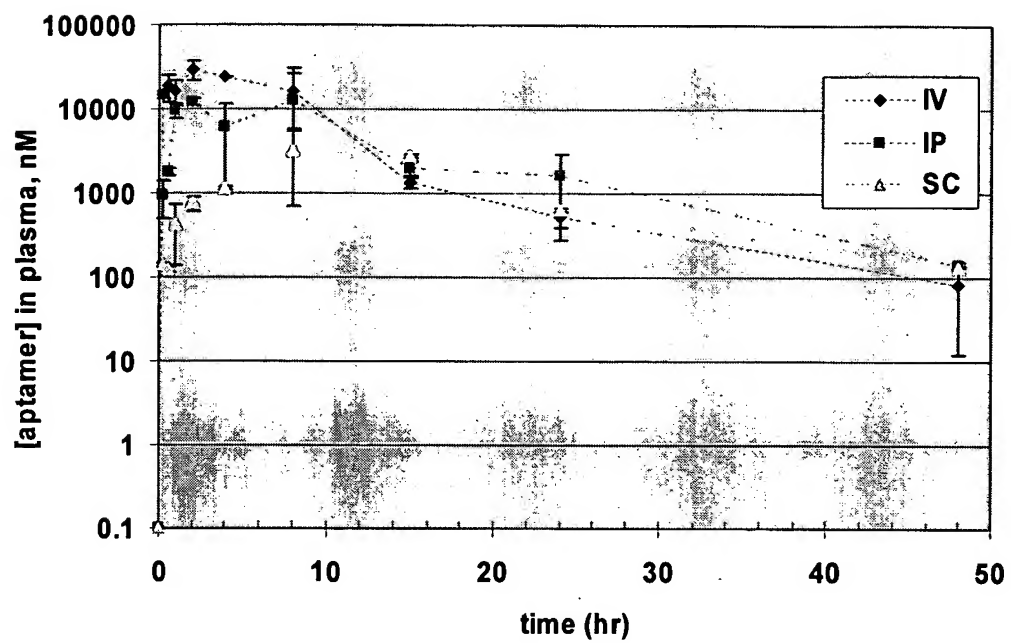


Figure 17

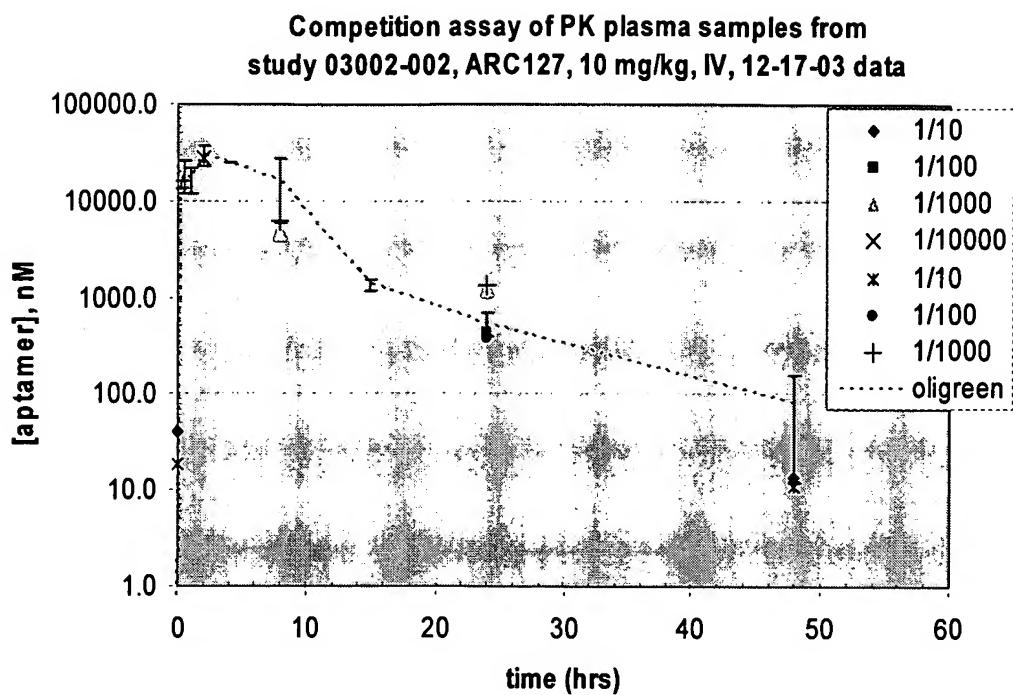
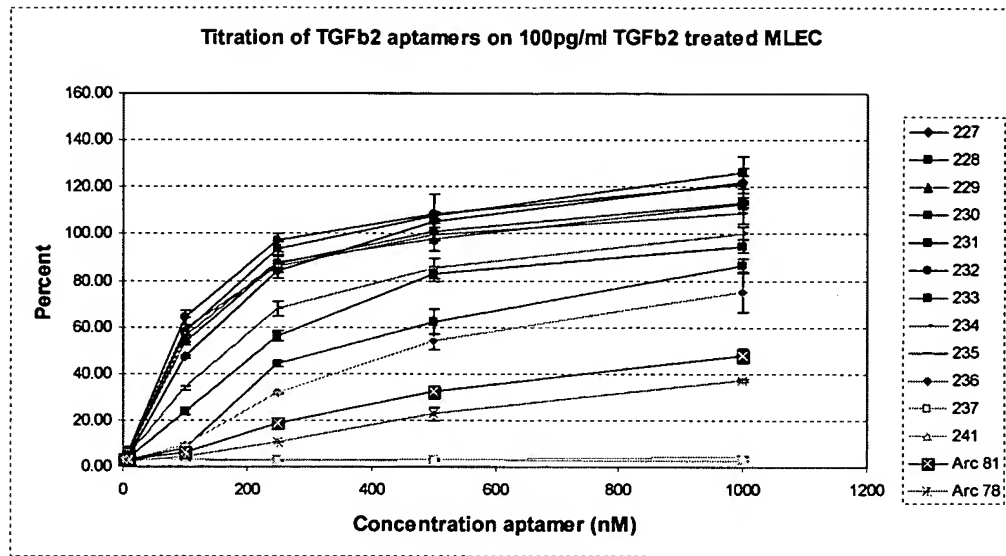


Figure 18

A.



B.

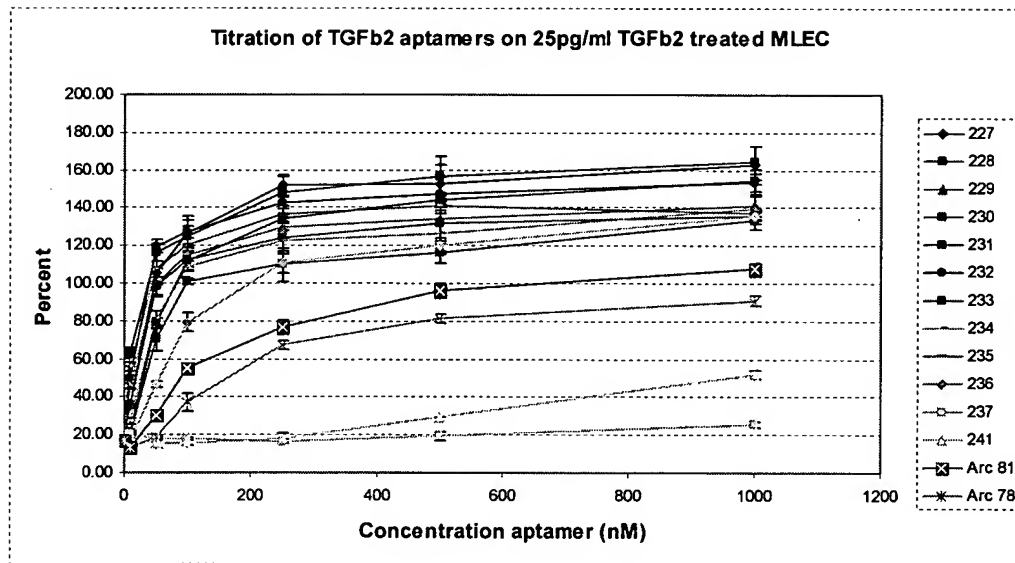
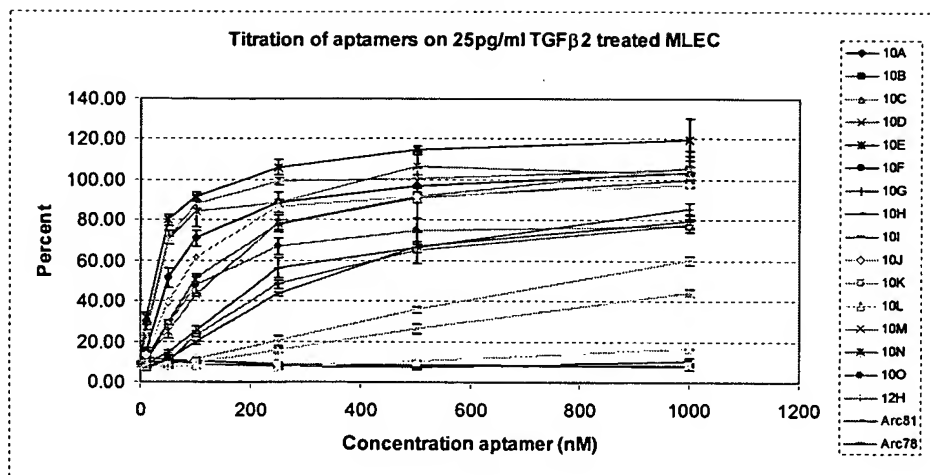
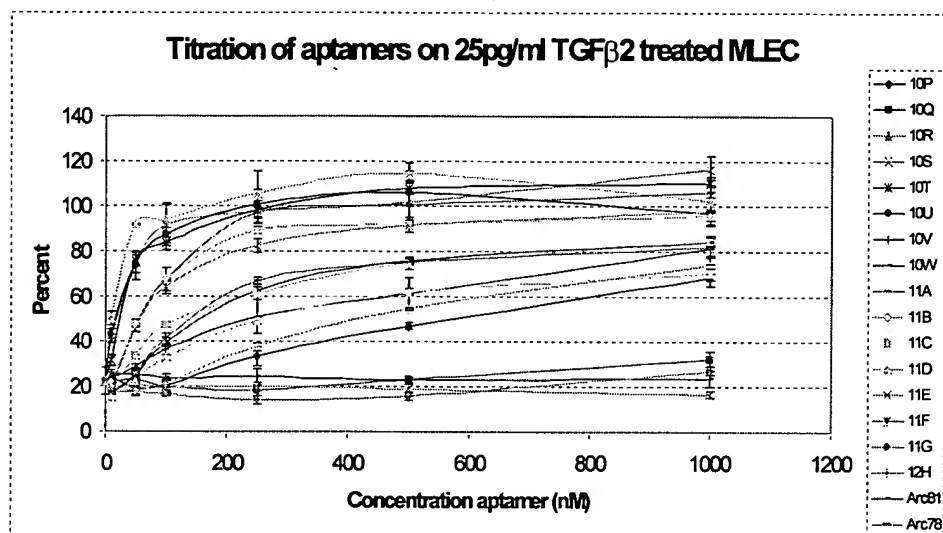


Figure 19

A.



B.



C.

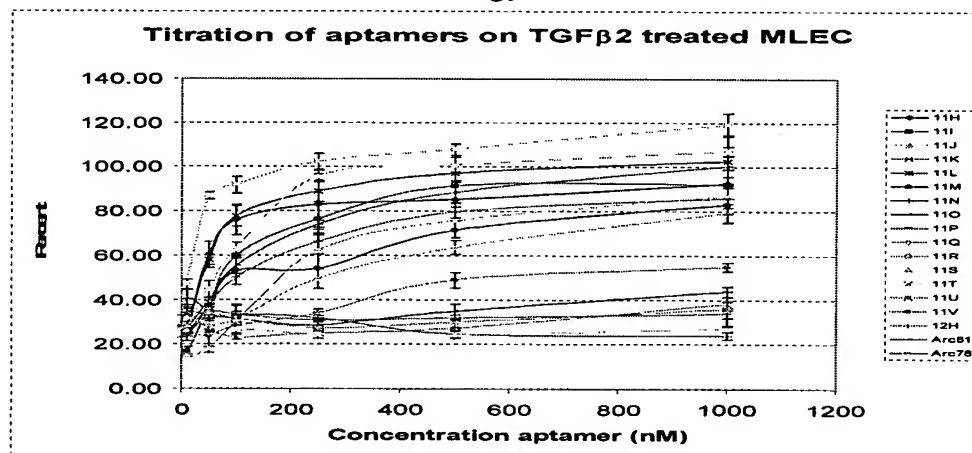
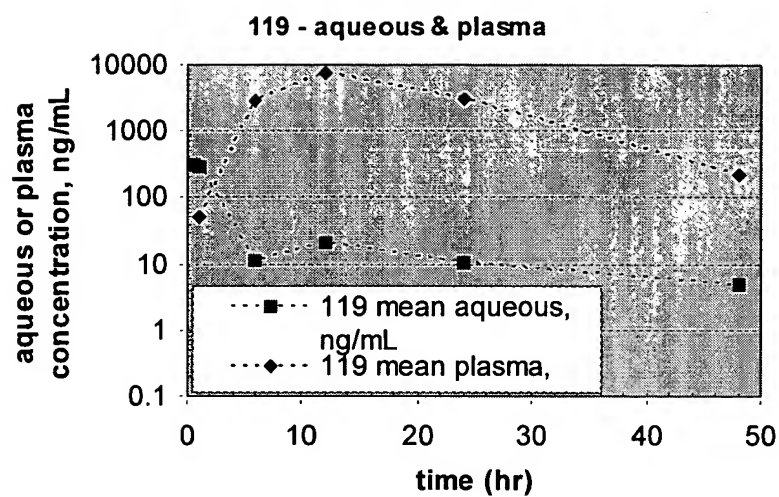


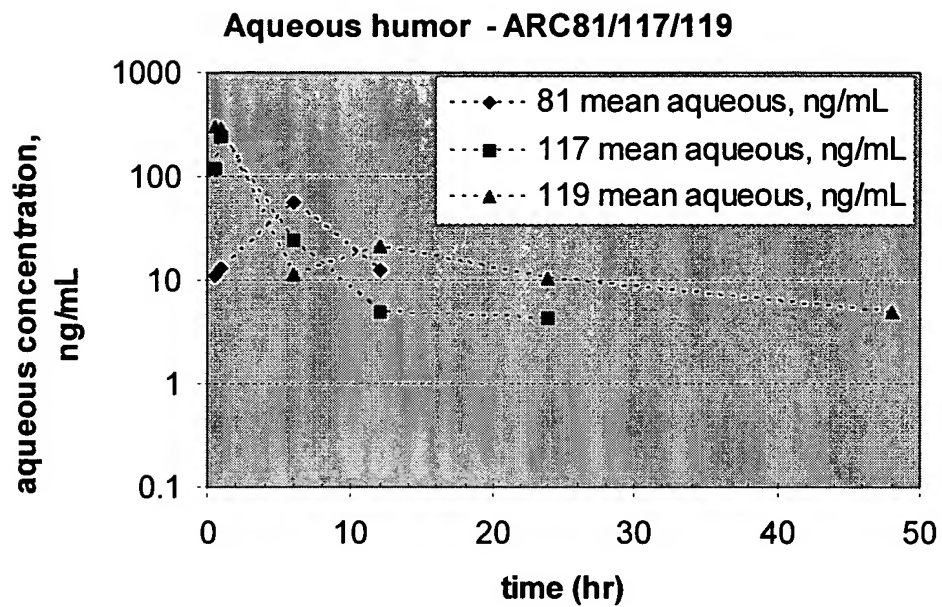
Figure 20

**Figure 21A**



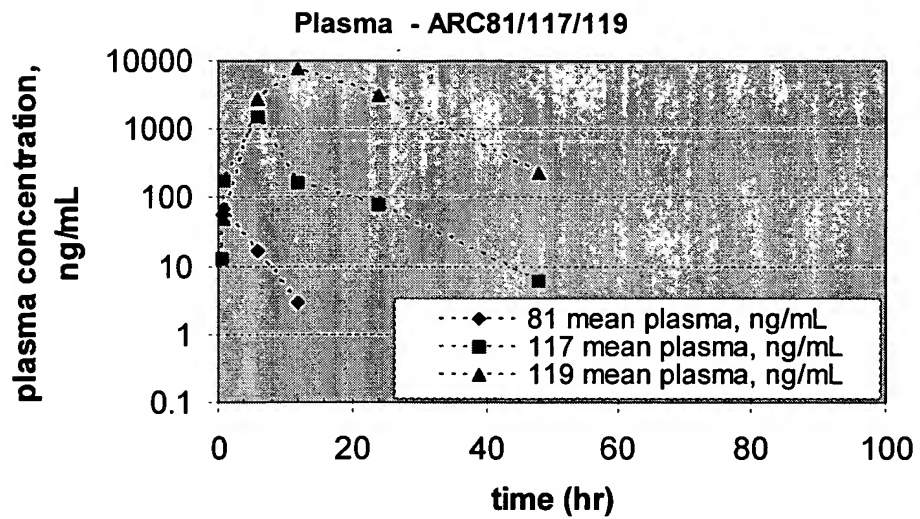
- subconj injection, 1 mg/eye, bilaterally
- $C_{max} (aq) = 303.8 \text{ ng/mL}$  (28.4 nM) at 0.5 hr
- $C_{max} (pl) = 7750.5 \text{ ng/mL}$  (721.1 nM) at 12 hr
- $MRT (aq) = 12.80 \text{ hr}$  ( $t_{1/2} = 17.52 \text{ hr}$ )
- $MRT (pl) = 17.28 \text{ hr}$  ( $t_{1/2} = 6.94 \text{ hr}$ )

Figure 21B



- subconj injection, 1 mg/eye, bilaterally
- MRT (81) = 6.03 hr ( $t_{\max}$  = 6 hr)
- MRT (117) = 3.62 hr ( $t_{\max}$  = 1 hr)
- MRT (119) = 12.80 hr ( $t_{\max}$  = 0.5 hr)

Figure 21C



- subconj injection, 1 mg/eye, bilaterally
- MRT (81) = 3.13 hr ( $t_{max}$  = 1 hr)
- MRT (117) = 9.22 hr ( $t_{max}$  = 6 hr)
- MRT (119) = 17.28 hr ( $t_{max}$  = 12 hr)

Figure 22A

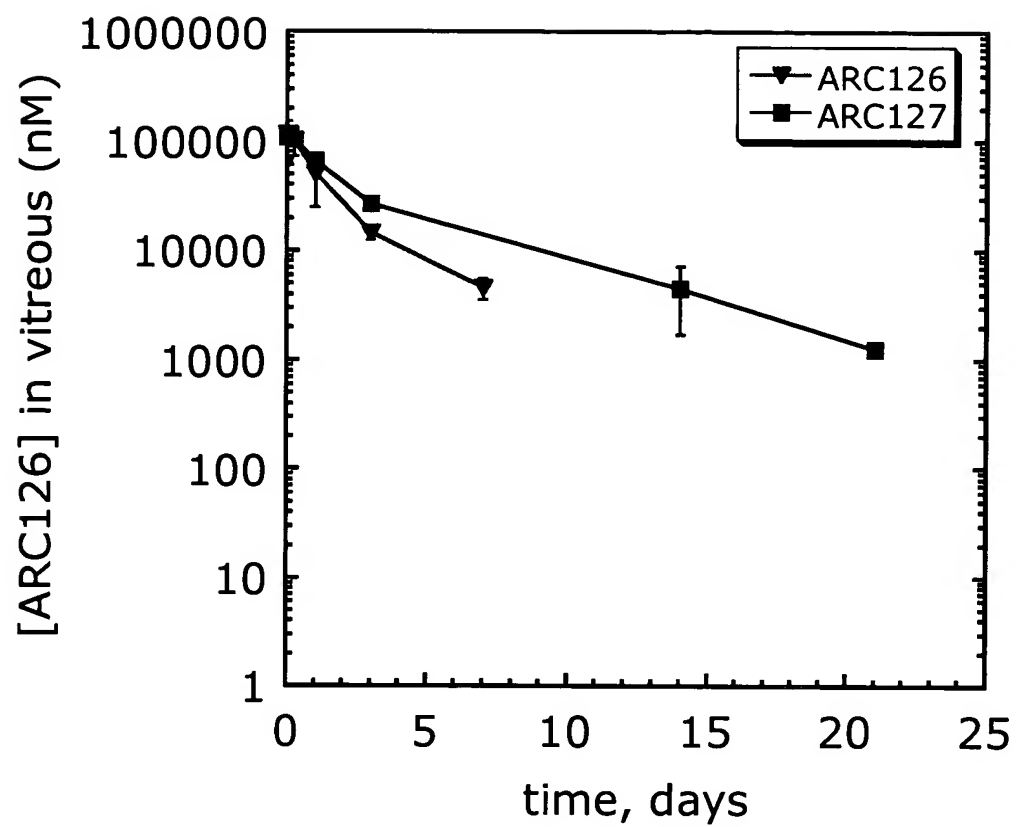




Figure 22B

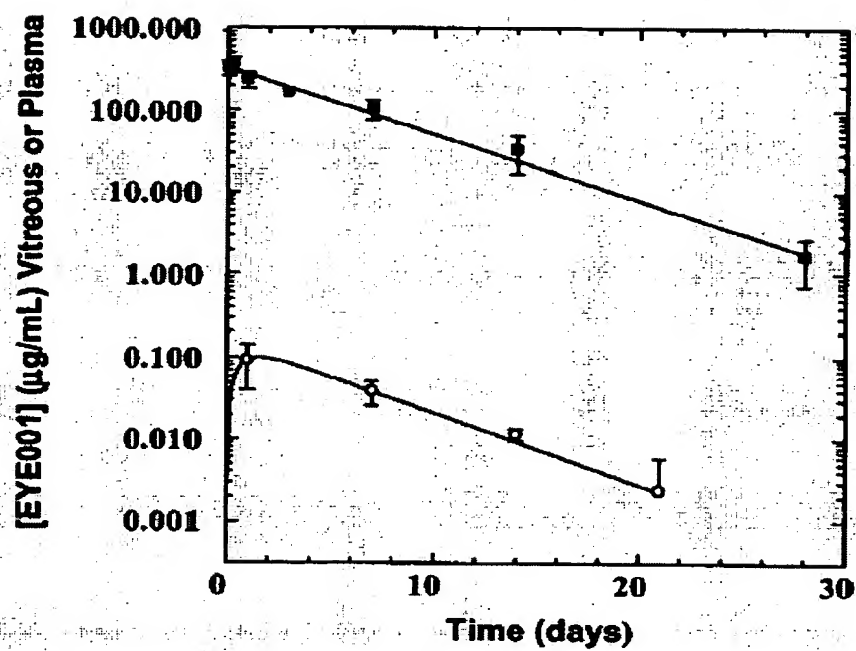


Figure 22C

